

MICROWAVE SIGNAL EDGE DETECTOR CIRCUIT FOR IMPROVED CLOCK RECOVERY

Abstract of the Disclosure

5 A signal edge detector circuit is described for the detecting the signal transitions
in a stream of microwave signals at a predetermined clock signal rate, particularly for
OC-768 data streams. Selected transmission lines in the signal edge detector circuit
reflect the signal transitions to terminate each signal transition at the output terminal of
the detector circuit and to cancel out each other at a circuit node to prevent reflected
10 transitions back to the input terminal of the detector circuit and to the transmission lines.
With a squaring circuit at the output terminal of the detector circuit and a narrow-band
filter at the output of the squaring circuit, the clock signals at the predetermined clock
signal rate are recovered.